

**Testimony of Robert R. Bell, Ph.D.  
President, Tennessee Technological University**

**Before the Committee on Science  
U.S. House of Representatives  
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## **INTRODUCTION**

Tennessee Tech is the state's only technological university, with a strong reputation in engineering and the sciences. A comprehensive university serving over 9,000 students, TTU retains a strong commitment to excellence in undergraduate education, with majors in engineering, business administration, education, the arts and sciences, nursing, agriculture, and human ecology. We also offer a wide range of graduate programs, including doctoral degrees in many fields of engineering, environmental sciences, and "exceptional learning" in education. TTU hosts three accomplished state Centers of Excellence in Energy Systems Research, Water Quality, and Manufacturing Research. Last year, Tennessee Tech was listed by U.S. News and World Report as one of only 11 mid-sized universities in the "Best in the South" category and in the top tier of the "Best Public and Private Colleges and Universities" in the South. TTU is a member of the American Association of State Colleges and Universities.

While TTU is a public university serving students from all over our state, many other states, and many foreign nations, we retain a special mission-based commitment to serve the Upper Cumberland Region of Tennessee. The Upper Cumberland Region, containing roughly 40 counties, ranges from just East of Nashville to just West of Knoxville, and from the Kentucky border to just north of Chattanooga. The region TTU serves is predominantly rural and has been dramatically impacted by the meth problem.

## **SIGNIFICANCE OF PROBLEM / RISE IN THE NUMBER OF USERS AND LABS**

Meth was first introduced as an illicit drug in Tennessee in 1978. A Tennessee native, who had been imprisoned in California, brought the knowledge and production methods back to his home after he was released. Unfortunately, he also set up a "school" to teach individuals how to "cook" meth for a fee.

District Attorney General Bill Gibson, a TTU alumnus, reported that the Upper Cumberland Region began seeing the impact of meth in the early 1990s with several violent incidents that were difficult to explain. The consensus of the medical community and law enforcement is that meth is the most addictive and dangerous drug seen in the Upper Cumberland area.

A homemade poisonous cousin of pharmaceutically based amphetamine or speed, meth has long been the dominant drug problem in California. It is an evil blend of common household and farming products including anhydrous ammonia, acetone, antifreeze, and the active ingredients in some cold medicines, ephedrine and pseudoephedrine. It has one of the highest addiction rates of all illegal drugs, including crack cocaine, and one of the lowest recovery rates, about five percent.

Until the past decade, meth was a distant problem. It ravaged Pacific and Northwestern states for a long time and more recently infected the Midwest. After moving into Middle Tennessee, in the past 10 years in particular, it has flourished in small labs in rural communities where detection is difficult. Today, according to the U.S. Drug Enforcement Agency, a full 75 percent of all methamphetamine labs seized in the Southeast are in Tennessee, growing from 135 labs in 1999

to 499 labs in 2003. Last year, according to National Clandestine Laboratory Database numbers, there were 1,259 lab incidents in Tennessee, third-highest in the nation. The National Drug Intelligence Center considers the Cumberland Plateau the richest source of methamphetamine in the state.

Meth presents a unique danger to regions like Middle Tennessee. The laboratories used to make the drug are often portable and/or clandestine, so they are easily created. According to the Tennessee Governor's Task Force on Methamphetamine Abuse, labs are found virtually every day within every county in Tennessee. That makes this deadly drug as available in the farthest reaches of rural America as it is in the big city streets.

Geographically, Tennessee is unique because it is bordered by eight other states. The interstate and state highway systems crisscross Tennessee's four major cities and traverse each of its borders. These highways, according to the Koch Crime Institute, carry a very large volume of traffic and are a primary means of moving drugs to and through Tennessee. As a result, the drug situations in the neighboring states have an impact on the drug situation in Tennessee.

The availability and demand for meth continues to increase throughout Tennessee. While much of the meth consumed in the state is transported from Mexico and the Southwest border area, clandestine meth labs can be found everywhere in Tennessee and are encountered daily by law enforcement. These facts are a stark contrast to the problem of a few years ago. The labs discovered in Tennessee are generally characterized as small and unsophisticated. These clandestine meth labs pose a significant threat because lab operators are frequently armed and substantially involved in the drug's distribution.

Dozens of TTU alumni, as well as faculty members, are on the front lines in the battle against this deadly drug. They are professionals in law enforcement, the judicial system, social and medical services, state government and education. In the past two years, these men and women have rallied in a concerted effort to wipe out the worst drug threat to ever face our region.

## **PROBLEM SCOPE: HOW IT HAS AFFECTED TENNESSEE AND THE UPPER CUMBERLAND**

Currently, Tennessee is third in the nation in meth lab-related incidents. Meth lab arrests have more than tripled since 1999. It is estimated that more than 700 children will be taken into state custody in 2005, at a cost of over \$4 million to the state. The production process leaves behind five pounds of toxic waste product for every one pound of meth. Removal and handling of evidence and hazardous residue can cost between \$5,000 and \$20,000 per site, according to the 13th Judicial District Drug Task Force. Restoration of the site to safe, habitable conditions can cost additional tens of thousands of dollars. Businesses suffer from escalated costs of health coverage, lost time at work, workplace injuries, and theft. And the meth users and their families suffer dramatic, even life-threatening health problems associated with this substance abuse.

Dr. Sullivan Smith, the county medical examiner and another TTU alumnus, described meth as the most dangerous drug he has dealt with in his career and claims it is responsible for the

majority of violent crime in Cookeville in the past three or four years. Dr. Smith, who is DEA-certified to enter and seize a meth lab, expresses concern for the children meth affects. These labs, besides being toxic, are places where children are growing up in the midst of violence, weapons, and prostitution.

Meth also has a profound effect on our school systems. Johnny Cordell, Upper Cumberland Representative to the Tennessee Organization of School Superintendents, noted that in his county (Sequatchie County, population approximately 13,000), law enforcement locates and destroys one meth lab each week. Mike Prock, Chairperson of the Upper Cumberland School Directors' Study Council, emphasized how unrealistic it is to expect children to come to school ready to learn when their family unit is being destroyed by meth addiction. Lana Sievers, Commissioner of the Tennessee Department of Education, noted that meth is not an isolated problem. Almost 10 percent of Tennessee students in the K-12 system report having tried meth. This drug is being used and produced in their homes, and it is making its way into the schools.

In addition to the impact on school systems, meth abuse has terrible consequences for family members, especially young children. Children taken from active clandestine meth labs are stripped of all possessions. They are normally taken to an emergency room at a hospital, where they are tested, frequently by needle. They are separated from adult family members, sometimes from other siblings, and cannot even keep a favorite teddy bear for comfort. TTU alumnus and child protective services case manager Betsy Dunn considers meth the worst form of child endangerment she has ever seen. Children are neglected to the point where they are often the primary caretakers of their siblings and their parents as well.

Meth also has profound effects on state and local governments and support resources. Often, smaller counties in Tennessee simply do not have the resources to address the meth problem and must call for outside assistance. In a typical raid on a clandestine meth lab in a rural county where an arrest is made, at least four officers are needed. Current guidelines stipulate that a "partner" system must be used, with a minimum of two officers in the residence/lab, one as a lead and one as a backup. Because of time constraints associated with potential exposures to the toxic environment, regulations also stipulate that a "rotation" team of two additional officers be outside the residence, ready to rescue those inside and ready to rotate after the first team reaches a specified time limit in the facility. Emergency personnel and/or fire personnel are also required on scene in case of an accident. A typical clean-up operation may take from 8 to 15 hours. During this time, local county resources are stretched to a breaking point, and county sheriffs often must call for support from other agencies. County medical providers and facilities are also often overwhelmed by spillovers from clandestine laboratory raids.

## **AGENCIES THAT CURRENTLY RESPOND TO RESIDENTIAL METH LABS / HOW LABS ARE CURRENTLY ASSESSED, CLEANED AND REMEDIATED / STATE LAWS AND REGULATIONS THAT GUIDE THIS PROCESS**

Local law enforcement agencies are often the first notified about a suspected clandestine meth lab. Typically, when a lab is identified, a team of responders is assembled. First on the scene may be local law enforcement agencies (city police, county sheriff's office). Only individuals

who are "Clandestine Lab Certified" may enter the residence or clandestine lab. They may be supplemented by agents from the Drug Task Force, Drug Enforcement Agency, or the Tennessee Bureau of Investigation. Emergency medical services personnel are also called for stand-by support. Often, other support is provided by local fire department personnel, the Tennessee Department of Children's Services, and other service providers such as the Upper Cumberland Community Services Agency. Certified hazardous materials contractors are used to gather, transport, and dispose of materials in the meth lab. The Office of the District Attorney and, frequently, the Public Defender's Office are also closely involved. As the site is catalogued and remediation is initiated, officials from the regional public health offices and environmental protection offices are also often involved.

Protocols that guide assessment and remediation of clandestine methamphetamine labs are found in Tennessee Code Annotated, Title 68, as amended by Public Acts 2004, Chapter 855, "Inspection, Testing, and Quarantine of Property Where Methamphetamine was Manufactured," and by "Emergency Rules of the Department of Environment and Conservation-Standards for Testing and Cleaning Clandestine Drug Manufacturing Sites" (Chapter 1200, 1-19). Also appropriate is Tennessee Department of Environment and Conservation Interim Guidance, February 22, 2005, "Reasonable, Appropriate, Protective Cleanup Responses and Documentation Guidance for Properties Quarantined due to Clandestine Methamphetamine Laboratory (CML) Activities Pursuant to TCA 68-212 Part 5."

## **LIMITATIONS OF ASSESSMENT/REMEDATION STRATEGIES**

While current assessment/remediation strategies are clearly more refined than those in place just a few years ago, much remains to be done. Entrance guidelines are still loose. Individuals entering a clandestine meth lab are in effect entering a working hazardous materials/chemistry laboratory, but one where few traditional safety measures have been in place. There are no fume hoods or air circulation mechanisms. There has been no routine clean-up protocol in place for spills. While the presence of meth is presumed, uncertainty remains about the levels and types of other hazardous gases, fluids, and solids in the lab environment. Science related to byproducts and the toxicity of the environment is still unclear.

Unfortunately, a baseline definition of what "clean" is, in terms of remediating labs, is not available. Research at the university level is needed to develop that definition. Fundamental research describing what "clean" really is must happen now.

A great deal of work remains to be done on the effects of exposure to the clandestine laboratory in children, both from a medical and a psycho-social context. Research and work must be done to develop more effective treatment/rehabilitation programs for meth users. Little evidence exists today on the success of programs specifically addressing the impacts of meth on the body and brain, and what evidence does exist gives little hope of remediation with current treatments. House Bill 798 will help take major steps in the right direction toward this effort. Universities can play a major role as strategic partners in developing new detection and remediation strategies, helping develop standard reference materials and validation protocols. Higher education can also play a role in identifying adverse biological risks on the intervention teams, as

well as studying the biological/medical and psycho-social effects on children and others in the clandestine meth labs.

## **COLLABORATIONS WITH LOCAL LAW ENFORCEMENT AND THE MEDICAL COMMUNITY**

Tennessee Tech has collaborated with a number of state and regional agencies for some time. Working with the Office of the Governor and the 13th Judicial District Drug Task Force, TTU faculty and staff participated in a wide range of activities addressing the meth problem; the university has been identified by the Drug Task Force as a "central resource" for the region.

TTU units involved in these efforts include the Department of Chemistry; Center for Structural Chemistry; the Center for Management, Utilization, and Protection of Water Resources; the doctoral program in environmental sciences; the Business Media Center; and the College of Education. Key individuals involved include Dr. Scott Northrup, Chair, Department of Chemistry; Dr. Jeff Boles, Director, Environmental Sciences Ph.D. program; Dr. Eugene Kline, Professor of Chemistry; Dr. Martha Wells, Water Center Professor; Dr. Barbara Jackson, Professor of Chemistry; Dr. Comfort Asanbe, Professor of Curriculum and Instruction; and Mr. Kevin Liska, Director, Business Media Center. The university is eager to offer more.

TTU research/service agenda can be generally categorized into four areas: Manufacturing Process Research, Education and Information, Detection, and Remediation, described below.

**Manufacturing Process Research:** Faculty in the TTU Chemistry Department, the doctoral program in environmental sciences, and the Water Center have recently been involved in a project sponsored by the Governor's Office and the 13th Judicial District Drug Task Force. Using "street" methods and solvents for extraction certified by the Tennessee Bureau of Investigation, these studies demonstrated that 50 to 70 percent extraction efficiencies for pseudoephedrine can be achieved from most combination products (such as cold medicines that combine pseudoephedrine with other drugs) typically associated as viable sources for the compound that is turned into meth. TTU partnered with Dr. Sullivan Smith on these experiments. Charlotte Burks, our state senator and a member of the Drug Task Force and Governor's Task Force on Methamphetamine Abuse, credited our research in this area for helping speed the development of the Governor's new bill.

**Education and Information:** Several of TTU's social service areas, including the "Make a Difference" project in the College of Education, regularly see the collateral effects of meth abuse on children. TTU enjoys a very close partnership with school systems throughout the Upper Cumberland Region of Tennessee and hosts the regional P-16 Council. Faculty and staff from the Colleges of Education, Arts and Sciences, Engineering and Business Administration have all collaborated to help develop educational programs addressing meth abuse. Some of these projects have involved curricular initiatives, with the intent of "embedding" anti-meth messages in the elementary school curriculum. Early work was done in Cumberland County, Tennessee, and is now being expanded into Putnam and Jackson Counties.

Business Media Center Director Kevin Liska, in collaboration with the Putnam County Health Department and the 13th Judicial Drug Task Force, created a Meth Education Tool Kit to be distributed to law enforcement, schools, emergency services personnel, property owners and others -- all potential victims of meth manufacture and abuse. In the form of a CD-ROM, the kit includes interviews with front-line meth specialists from the Tennessee National Guard, the Tennessee Departments of Children's Services and Health, the U.S. EPA and Drug Enforcement Agency, and local social services and medical agencies. The CD is organized into 22 community target markets presenting video on meth facts, medical impact, testimonials, and financial impact -- all directed toward four age categories.

**Detection:** TTU Chemistry Professor Jeff Boles consults with the Committee on bills related to meth and has been studying the meth problem from a number of angles over the long term. Through the TTU Center for Structural Chemistry, which he administers, he proposes a two-part attack, the first of which is detection in a pre-warrant situation. While early work has been done on a quick-detection kit, collaboration with the NIST is necessary to identify existing standards of detection and benchmark the actions by other states in order to develop new standards at the national level. The center proposes researching the external environment where vapors are vented outside a home or car being used as a mobile lab. Estimates are that effective lab detection technologies will someday help generate a turnaround time of one day on crime scene data that would simplify the issuance of warrants.

**Remediation:** The second prong in Professor Boles' research is environmental clean-up. Toxic byproducts leave meth sites highly contaminated, from water to air to soil to the structure that housed the clandestine operation. Research is needed to make some form of remediation economically feasible. Rapid environmental analysis kits, with very short on-site cycle times, must be developed to identify hazards associated with clandestine lab environments. More efficient methods for identifying and appropriately containing lab products and byproducts must be addressed. Research must yet be done on appropriate methods and materials for "cleaning" a lab and remediating a site. Standards must be developed to address the question of "how clean is clean?" The potential for meaningful doctoral research in TTU's environmental sciences Ph.D. program, as well as similar programs nationwide, exists for exactly these topics.

## **RESEARCH GUIDANCE NEEDED TO ADDRESS THE ENVIRONMENTAL HAZARDS OF RESIDENTIAL METH LABS**

The scope of HR 798 provides a mechanism for making major progress in the research and science associated with meth abuse. This is a long-term effort, and the problem will not be solved in the next year or even the year after. But colleges and universities in general, and TTU in particular, want to be involved in moving toward a solution. Listed below are some specific descriptions of how TTU is already involved and how it can help in the future, but other possibilities for significant research can be generated through HR 798.

**Manufacturing Process Research:** Significant additional work is needed to understand the process and science associated with the manufacture of meth. As mentioned previously, recent work at TTU (December 2004/January 2005) has demonstrated that high efficiencies of meth

production can be achieved with over-the-counter products, using inexact "street" methods of production. This work needs to be expanded and refined. Work needs to be done to "cook" the individual components to more fully understand all of the compounds produced (product and byproducts). This will lead to a better understanding of the hazards of each individual and combination byproduct. Work should continue on decomposition research, examining methods for chemical bonding that do not allow product decomposition.

**The Chemistry of Detection:** Much work remains in the chemistry of detection. Current processes are slow and inefficient. Cycle times for analysis are long, in a relative sense, and present problems for efficient law enforcement. More efficient detection and diagnostic tools must be developed so that sites can be more rapidly identified and reaction times shortened. Long-term research should focus on mechanisms that quickly detect the presence of hazardous chemicals in a rental home, a motel room, or a college residence hall, much the same as a smoke alarm detects the potential for fire. Studies should continue on environmental sampling, with a focus on developing a detection mechanism for sampling air surrounding a residence.

**Lab Fingerprinting:** Tennessee Tech has proposed research in developing methods for "fingerprinting" illegally manufactured meth drugs synthesized in a clandestine lab contain sufficient impurities allowing such identification since these labs are generally poorly operated. No two batches or lots of meth will be identical; thus, they can be viewed with the same integrity as a human fingerprint. Such fingerprinting would allow law enforcement agencies to reach back into the manufacturing process, more clearly identifying specific products used.

**Remediation:** Research must continue on the processes implemented after labs are discovered. Rapid environmental analysis kits, with very short on-site cycle times, must be developed to identify hazards associated with clandestine lab environments. More efficient methods for identifying and appropriately containing lab products and byproducts must be addressed. Research must yet be done on appropriate methods and materials for "cleaning" a lab and remediating a site. Standards must be developed to address the question of "how clean is clean?"

**Biology/Psychology:** Significant additional work must be conducted on the biological and psychological sciences associated with meth production and abuse. Much new work on the effects of the lab environment on children must be undertaken, focusing on both the biological and psycho-social impacts of the environment. Many physicians believe that current treatment paradigms for meth abusers are highly ineffective, and much work remains to be done on appropriate methods for faster, more complete rehabilitation. In the TTU Department of Counseling and Psychology, Assistant Professor Comfort Asanbe, a licensed psychologist, gathers psychological data on children who have been removed from homes where meth was abused or cooked. Exposure to meth could be linked to cognitive problems, and the environment is hazardous.

**Education and Science:** Work also needs to continue on the interaction of science and education to appropriately demonstrate the science associated with meth to different age groups in order to clearly identify the medical and social toxicity of the drug. While this is not the focus of HR 798, it clearly is a related, vital component of addressing the problem and eventually eliminating many of the hazards associated with the clandestine production of the drug. There is

also a need for more public education and community awareness and training modules for delivery on the Internet, providing more scientific content.

The ripple effect of a drug like meth makes it dangerous; it is not simply a matter of one person's addiction, it is the peripheral effects that add up to a significant threat to society. The motivation for attacking the problem head-on is strong. The effects of meth in the local communities surround Tennessee Tech, a regional university located in a rural area. The labs affect and contaminate the environment. Production and use have a devastating effect on the children TTU hopes to eventually serve.

As indicated earlier, alumni of institutions just like Tennessee Tech are leading this fight. The war can only be won if it is attacked on all sides by all constituents. Smaller universities play a critical role; they can address this lethal epidemic. They provide the expertise in qualified and interested faculty members who want to do this type of research. They have an inherent motive to address the quality of students served in local communities.

## **RECOMMENDATIONS / RESPONSE TO HR 798**

Much more can be done, however, to address the problem, not only at home, but across the country. Because of this bill, faculty at regional universities like Tennessee Tech can make use of their expertise, engaging in the level of research required to find real solutions to the problem. In summary, Tennessee Tech faculty members propose expanding research in the following areas:

- **In manufacturing process research**, continuing our work in demonstrating extraction efficiencies, we propose "cooking" the individual components to more fully understand both product and byproduct, and we need to examine methods for chemical bonding that do not allow product decomposition.
- **In the chemistry of detection**, we propose developing new standards at the national level for detection by researching the external environment where vapors are vented outside a home or car being used as a mobile lab. A quick-detection kit will help generate a turnaround time of one day on crime scene data, simplifying the issuance of warrants. Long-term research should focus on mechanisms that quickly detect the presence of hazardous chemicals in a rental home, a motel room, or a college residence hall, much the same as a smoke alarm detects the potential for fire.
- **A technique called lab fingerprinting** -- a system of distinguishing among individual lots or batches of meth -- would allow law enforcement to tie a crime involving meth abuse to the original manufacturer of the drug. No two batches of meth are identical; thus, they can be viewed with the same integrity as a human fingerprint.
- **In remediation**, we can address more efficient methods for identifying and containing lab products and byproducts with a rapid environmental analysis kit, and we simply must address the question of "how clean is clean?" in remediation efforts.

- **Combining biology with psychology**, we must better understand the physical and behavioral effects of a lab environment on victims of meth, particularly children, in order to devise more appropriate methods for faster, more complete rehabilitation.

- **In education and science**, we can expedite the spread of curricular initiatives and research findings in an online clearinghouse, thus addressing a glaring need for such a central source of information.

It is not a university's place to go out into the streets to arrest criminals, or to remove children from their homes when the environment is unsafe, or to treat an abuser's addiction. It is a university's place to train the professionals who take on the difficult jobs on the front line of the meth battle. It is a university's place to conduct research that can provide the tools these professionals need to make a difference.

With the appropriate funding for equipment and other resources, colleges and universities like Tennessee Tech stand ready to do their part in implementing HR 798, and the results of our research can be applied wherever meth is a problem. The Methamphetamine Remediation Research Act of 2005 attacks the problem from arguably the most important angle. It takes the next logical step in one of the most perplexing and complicated elements of the meth problem -- detection and clean-up of meth manufacturing sites. The committee's leadership in creating this bill is to be applauded, and TTU offers its wholehearted support in every level of this research. TTU can be a full partner in the bill's proposed research program on detection, remediation, and residual health effects on children.

## **ATTACHMENT 1**

### **GOVERNOR PHIL BREDESEN'S "METH FREE TENNESSEE" BILL**

On February 24, 2005, Governor Phil Bredesen outlined the major components of comprehensive legislation to address methamphetamine manufacturing and abuse in Tennessee, and took another step toward raising public awareness by proclaiming March as "Meth-Free Tennessee Month."

Major provisions of the bill (attached as an appendix to this testimony) include:

- Limitations on the sale of cold and sinus products containing the decongestant pseudoephedrine, the vital ingredient in the manufacture of methamphetamine. While many pseudoephedrine products will go behind the counter in licensed pharmacies, liquids and gel caps will be exempt from restrictions because they currently are not deemed viable in the meth manufacturing process.
- Closure of the so-called "personal-use loophole" in criminal law, which allows meth cooks to secure lighter penalties by claiming they manufactured the drug only for personal use.
- Requirement for health professionals to report meth lab-related burns and injuries to local law enforcement, similar to the existing requirement to report gunshot and knife wounds.
- Creation of an online registry within the Department of Environment and Conservation listing properties quarantined by law enforcement due to meth-lab contamination. A separate registry will be created within the Tennessee Bureau of Investigation listing the names and offenses of convicted meth cooks.

Separate from the legislation, the Governor's FY05-06 budget includes nearly \$7 million to attack the meth problem in Tennessee. Among other items, the budget includes:

- \$2.4 million for increased criminal penalties for meth-related crimes, including closure of the personal-use loophole.
- \$1.7 million to launch a drug court pilot project endorsed by the White House Office of National Drug Control Policy to test the effectiveness of a combination of treatment and light incarceration.
- \$1.5 million to launch a statewide education and public awareness campaign.
- \$600,000 to provide meth-lab response training to law enforcement and other first responders.

**SUMMARY**  
**SB2318, HB2334**

SECTION 1: Designates legislation as the “Meth-Free Tennessee Act of 2005.”

SECTION 2(a): Requires that any product containing an “immediate methamphetamine precursor” must be sold only by licensed pharmacies. (“Immediate methamphetamine precursor is defined by Section 9.)

SECTION 2(b): Exempts products that cannot be used to manufacture methamphetamine. Requires the Department of Health, in consultation with the TBI, to determine whether a product can be used to manufacture methamphetamine. Requires the Department of Health to maintain a list of exempt products. The initial list shall include liquid preparations and gel capsules.

SECTION 2(c): Prohibits the sale of more than three packages of a non-exempt product or nine grams of pseudoephedrine to the same person over a 30-day period, unless that person has a physician’s prescription.

SECTION 2(d): Mandates that only a pharmacist, or pharmacy technician or pharmacy intern working under the supervision of a pharmacist, can sell a non-exempt product. Requires purchaser to present ID. Requires pharmacies to maintain an electronic record of the sale in the form of a pharmacist prescription order or a written log.

SECTION 2(e): Requires that non-exempt products must be placed behind the pharmacy counter.

SECTION 2(f): Makes it a Class A misdemeanor, punishable by fine only, for a pharmacy owner or operator to violate this section. Requires violations to be reported to the Board of Pharmacy for review and appropriate action.

SECTION 3: Requires the Department of Health, in coordination with the Department of Education, to educate and raise public awareness of the dangers of methamphetamine manufacturing and abuse and to direct addicts to treatment resources.

SECTION 4: Requires health professionals to report methamphetamine laboratory-related burns and injuries to local law enforcement, similar to the existing requirement to report gun and knife wounds.

SECTION 5. Requires the Department of Environment and Conservation to maintain lists of individuals and businesses qualified to test and clean properties contaminated by methamphetamine manufacturing.

SECTION 6. Clarifies that the purpose of the existing provision to quarantine properties in which methamphetamine manufacturing has occurred is to prevent persons from being exposed to the hazards associated with manufacturing.

SECTION 7. Makes it a Class B misdemeanor to offer for rent or to live in property that has been quarantined, or to remove signs or notices of quarantine.

SECTION 8(a)-(b). Requires law enforcement to inform the Department of Environment and Conservation of a quarantine within seven days of issuing the quarantine order. Requires the Department to maintain an online registry listing properties that have been quarantined for at least 60 days, and to remove properties after the quarantine is lifted.

SECTION 9. Defines “immediate methamphetamine precursor” as ephedrine, pseudoephedrine or phenylpropanolamine or any products containing detectable quantities of those substances.

SECTION 10(a)-(f). Makes it a Class B felony for any person to initiate a process intended to result in the manufacture of methamphetamine.

SECTION 11(a)-(f). Makes it a Class D felony for any person to promote the manufacture of methamphetamine. Defines promoting as: Purchasing or possessing more than nine grams of an immediate methamphetamine precursor with intent to manufacture; delivering more than nine grams to another person who intends to manufacture; or selling or acquiring any substance or apparatus intended for use in the manufacturing process.

SECTION 12. Deletes TCA 39-17-434, which addresses possession of substances with intent to manufacture or with intent to convey to another person (now dealt with in Sections 10 and 11).

SECTION 13(a)-(f). Establishes within the TBI a registry of persons convicted of manufacturing methamphetamine. Requires court clerks, beginning September 1, to forward copies of judgments against persons convicted of manufacturing methamphetamine. Requires the Department of Correction to forward a list of those currently incarcerated for manufacturing methamphetamine.

SECTION 14. Makes it a Class A misdemeanor to attempt to use fraudulent means to pass a drug test.

SECTION 15. Removes the “personal use loophole” from current law. (Under existing law, methamphetamine cooks can secure a lighter criminal penalty by claiming they were manufacturing only for personal use.)

SECTION 16. Clarifies that if any provision of the act is held invalid by a court, then the other provisions will remain in force.

SECTION 17. States that the act shall take effect immediately, the public welfare requiring it.

**Filed for intro on 02/17/2005**  
**HOUSE BILL 2334**  
**By McMillan**  
**SENATE BILL 2318**  
**By Kyle**  
**AN ACT to amend Tennessee Code Annotated,**  
**Titles 39 and 68, relative to**  
**methamphetamine.**

WHEREAS, the Tennessee General Assembly recognizes that the clandestine manufacture of the illegal drug methamphetamine is a clear and present danger to the health and well being of the State of Tennessee; and

WHEREAS, the United States Drug Enforcement Administration (“DEA”) has found the availability and demand for methamphetamine continues to increase throughout Tennessee; and

WHEREAS, methamphetamine is commonly manufactured in clandestine laboratories that can be found across in Tennessee and are encountered daily by federal, state and local law enforcement; and

WHEREAS, the DEA estimates Tennessee now accounts for 75 percent of the methamphetamine lab seizures in the Southeast; and

WHEREAS, these clandestine methamphetamine labs pose a significant threat because lab operators are frequently armed and are often directly involved in the drug's distribution; and

WHEREAS, the problem of methamphetamine manufacturing and abuse is particularly destructive to the children in our state and more than 700 children are entering state custody each year as a result of methamphetamine lab seizures and related incidents; and

WHEREAS, clandestine methamphetamine labs also pose a potentially lethal environmental hazard due to the unregulated and illegal use of harmful chemicals involved in the production of methamphetamine; and

WHEREAS, the hazardous materials generated during the clandestine manufacture of methamphetamine impose a significant burden on property owners; and

WHEREAS, there is anticipation of an increase in methamphetamine use in Tennessee as the drug gains popularity over other abused drugs; and

WHEREAS, this Body desires to work with law enforcement, the healthcare industry, community agencies and other interested stakeholders to develop a comprehensive strategy including treatment and public awareness for addressing methamphetamine abuse; now, therefore,

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. This Act shall be known and may be cited as the Meth-Free Tennessee Act of 2005.

SECTION 2. Tennessee Code Annotated, Section 39-17-431, is amended by deleting the existing language in its entirety and substituting instead the following:

§ 39-17-431. (a) Except as provided in this section, any product that contains any immediate methamphetamine precursor may be dispensed only by a licensed pharmacy.

(b)(1) A product that contains any immediate methamphetamine precursor shall be exempt from the requirements of this section if the ingredients of the product are not in a form that can be used in the manufacture of methamphetamine.

(2) The department of health, in consultation with the bureau of investigation, shall determine whether a product that contains any immediate methamphetamine precursor is not in a form that can be used in the manufacture of methamphetamine. In making such a determination, the department and the bureau shall develop procedures that consider, among other factors,

(A) ease with which the product can be converted to methamphetamine, including the presence or absence of a “molecular lock” completely preventing the product’s use in methamphetamine manufacture;

(B) ease with which pseudoephedrine can be extracted from the substance and whether it forms a salt, emulsion, or other form:

(C) any other pertinent data that can be used to determine the risk of the product being viable in the illegal manufacture of methamphetamine.

(3) The department of health shall maintain a public list of such exempted products. Any person may request that a product be included on the exemption list. Such a list shall include, but not be limited to, products in the form of gel capsules and liquid preparations that contain any immediate methamphetamine precursor. The term “gel capsule” means any soft gelatin liquid-filled capsule that contains a liquid suspension, which, in the case of pseudoephedrine, is suspended in a matrix of glycerin, polyethylene glycol, and propylene glycol, along with other liquid substances. Regardless of the product manufacturer’s labeling, a gelatin-covered solid does not constitute a “gel capsule” under this provision.

(c) A pharmacy shall not sell to the same person more than three individual packages of any non-exempt product containing any immediate methamphetamine precursor, nor shall a pharmacy sell to the same person any combination of such products containing more than 9 grams of ephedrine, pseudoephedrine, or their salts, isomers, or salts of isomers, during the same 30-day period. The 9-gram limit shall apply to the total amount of base ephedrine and

pseudoephedrine contained in the products, and not the overall weight of the products. The prohibition contained in this subsection shall not apply to a person who obtains the product or products pursuant to a valid prescription issued by a licensed physician, certified physician assistant, or nurse authorized pursuant to Tennessee Code Annotated, Section 63-6-204, who is rendering service under the supervision, control and responsibility of a licensed physician and who meets the requirements pursuant to Tennessee Code Annotated, Section 63-7-207(13).

(d) The pharmacist, or any pharmacy technician or pharmacy intern under the supervision of the pharmacist, shall require any person purchasing a non-exempt product that contains any immediate methamphetamine precursor to present valid government-issued identification at the point of sale. The pharmacist, pharmacy technician or pharmacy intern shall maintain an electronic record of the sale under this subsection in the form of a pharmacist prescription order as provided by Tennessee Code Annotated, Section 63-10-206(c). The electronic record shall include the name of purchaser, name and quantity of product purchased, date purchased, purchaser identification type and number (such as driver license state and number), and the identity (such as name, initials, or identification code) of the dispensing pharmacist, pharmacy technician or pharmacy intern. If a system is not able to record the identification type and number, the pharmacist, pharmacy technician or pharmacy intern shall write the identification type and number on the prescription order. The electronic record also shall be maintained in such a manner that allows for the determination of the equivalent number of packages purchased and total quantity of base ephedrine or pseudoephedrine purchased. In lieu of maintaining an electronic record, a pharmacy may maintain a written register containing the name of purchaser, name of product purchased, date purchased, number of packages purchased, total quantity of base ephedrine or pseudoephedrine purchased, purchaser identification type and number (such as driver license state and number), purchaser's signature and name or initials of the pharmacist, pharmacy technician or pharmacy intern completing the transaction. The obligation of meeting the requirements of this section rests with the pharmacist.

(e) Non-exempt products containing an immediate methamphetamine precursor shall be maintained behind the counter of the pharmacy.

(f) A violation of any provision of this section is a Class A misdemeanor, punishable by fine only. If the person in violation is a licensed pharmacy or pharmacist, such violation shall be reported to the Board of Pharmacy for review and appropriate action. If a product is dispensed in violation of subsection (a), the owner or operator of the wholesale or retail establishment dispensing such product shall be in violation of subsection (a).

SECTION 3. Tennessee Code Annotated, Section 68-24-103(b), is amended by adding the following as a new subsection (2) and redesignating the existing subsections accordingly:

(2) As a component of the program described in subsection (1), the department, in coordination with the Department of Education, shall increase efforts to educate and raise public awareness of the dangers of methamphetamine manufacture and abuse, including but not limited to distribution of public information materials designed to oppose methamphetamine abuse, and shall direct persons suffering from the effects of methamphetamine abuse to proper treatment resources.

SECTION 4. Tennessee Code Annotated, Section 38-1-101(a), is amended by adding the following language after the word “violence,” in the first sentence: “or resulting from exposure to a methamphetamine laboratory or a methamphetamine laboratory related fire, explosion, or chemical release,”

SECTION 5. Tennessee Code Annotated, Section 68-212-502, is amended by deleting it and substituting instead the following:

The commissioner shall compile and maintain a list of certified industrial hygienists and such other persons or entities the commissioner certifies as qualified to perform the services of industrial hygienists. Such persons will test properties in which a process intended to result in the manufacture of methamphetamine has occurred, as defined by Section 10 of this act, to determine if a property is safe for human use. Such property may include, but is not limited to, leased or rented property such as a hotel or motel room, rented home or apartment, or any residential property. The commissioner shall also compile and maintain a list of persons authorized to perform clean-up of property where such a process has occurred. Such lists may be posted on the website maintained by the commissioner.

SECTION 6. Tennessee Code Annotated, Section 68-212-503, is amended by deleting subsection (a) in its entirety and substituting in its place the following language: The purpose of the quarantine provided for in this section is to prevent exposure of any person to the hazards associated with methamphetamine and the chemicals associated with the manufacture of methamphetamine.

SECTION 7. Tennessee Code Annotated, Section 68-212-503, is amended by adding the following new subsection, appropriately designated:

( ) It is prohibited for any person to inhabit quarantined property, to offer such property to the public for temporary or indefinite habitation, or to remove any signs or notices of the quarantine. Any person who willfully violates this subsection commits a Class B misdemeanor.

SECTION 8. Tennessee Code Annotated, Title 68, Chapter 212, Part 5 is amended by adding the following new section, appropriately designated:

(a) Within seven (7) days of issuing an order of quarantine, the law enforcement agency that issued the order shall transmit to the Commissioner at least the following information regarding the site: the date of the quarantine order, county, the address, the name of the owner of the site, and a brief description of the site (single family home, apartment, motel, wooded area, etc.).

(b) The department of environment and conservation shall maintain a registry of all properties reported by a law enforcement agency that have been under order of quarantine for at least sixty (60) days. The registry shall be available for public inspection at the department and shall be posted on its web site. Listed properties shall be removed from the registry when a law enforcement agency reports that the quarantine has been lifted in accordance with this part.

SECTION 9. Tennessee Code Annotated, Section 39-17-402, is amended by adding the following as a subsection (13) and renumbering the other subsections appropriately:

(13) “Immediate methamphetamine precursor” means ephedrine, pseudoephedrine or phenylpropanolamine, or their salts, isomers or salts of isomers, or any drug or other product that contains a detectable quantity of ephedrine, pseudoephedrine or phenylpropanolamine, or their salts, isomers or salts of isomers.

SECTION 10. Tennessee Code Annotated, Title 39, Chapter 17, Part 4, is amended by adding the following as a new, appropriately designated section:

- (a) It is an offense for a person to knowingly initiate a process intended to result in the manufacture of any amount of methamphetamine.
- (b) It shall not be a defense to a violation of this subsection that the chemical reaction is not complete, that no methamphetamine was actually created, or that the process would not actually create methamphetamine if completed.
- (c) For purposes of this section, “initiates” means to begin the extraction of an immediate methamphetamine precursor from a commercial product, to begin the active modification of a commercial product for use in methamphetamine creation, or to heat or combine any substance or substances which can be used in methamphetamine creation.
- (d) Expert testimony of a qualified law enforcement officer shall be admissible for the proposition that a particular process can be used to manufacture methamphetamine. For purposes of such testimony, a rebuttable presumption is created that any commercially sold product contains or contained the product that it is represented to contain on its packaging or labels.
- (e) A person may not be prosecuted for a violation of this section and of manufacturing a controlled substance in violation of 39-17-417 based upon the same set of facts.
- (f) A violation of this section is a Class B felony.

SECTION 11. Tennessee Code Annotated, Section 39-17-433, is amended by deleting the existing language in its entirety and substituting instead the following:

- (a) It is an offense for a person to promote methamphetamine manufacture. A person promotes methamphetamine manufacture who:
  - (1) Sells, purchases, acquires, or delivers any chemical, drug, ingredient, or apparatus that can be used to produce methamphetamine to another person, knowing that the person intends to use the chemical, drug, ingredient, or apparatus to manufacture methamphetamine, or with reckless disregard of the person’s intent;
  - (2) Purchases or possesses more than 9 grams of an immediate methamphetamine precursor with the intent to manufacture methamphetamine or deliver the precursor to another person who they know intends to manufacture methamphetamine, or with

reckless disregard of the person's intent; or

(3) Permits a person to use any structure or real property that the defendant owns or has control of, knowing that the person intends to use the structure to manufacture methamphetamine, or with reckless disregard of the person's intent.

(b) Expert testimony of a qualified law enforcement officer shall be admissible to establish that a particular chemical, drug, ingredient, or apparatus can be used to produce methamphetamine. For purposes of such testimony, a rebuttable presumption is created that any commercially sold product contains or contained the product that it is represented to contain on its packaging or labels.

(c) Possession of more than 20 grams of an immediate methamphetamine precursor shall be prima facie evidence of intent to violate this section. This subsection (c) shall not apply to the following persons who lawfully possess drug products in the course of legitimate business activities: (1) A retail distributor of drug products or wholesaler; (2) a wholesale drug distributor, or its agents, licensed by the Board of Pharmacy; (3) a manufacturer of drug products, or its agents, licensed by the Board of Pharmacy; (4) a pharmacist licensed by the Board of Pharmacy; and (5) a licensed healthcare professional possessing the drug products in the course of carrying out his profession.

(d) For purposes of this section, "structure" means any house, apartment building, shop, barn, warehouse, building, vessel, railroad car, cargo container, motor vehicle, housecar, trailer, trailer coach, camper, mine, floating home, watercraft, or any other structure capable of holding a clandestine laboratory.

(e) A violation of this section is a Class D felony.

SECTION 12. Tennessee Code Annotated, Section 39-17-434, is amended by deleting the section in its entirety.

SECTION 13. Tennessee Code Annotated, Title 39, Chapter 17, Part 4, is amended by adding the following as a new, appropriately designated section:

(a) There is hereby created within the bureau of investigation a registry of persons convicted after the effective date of this Act of a violation of 39-17-417 involving any substance defined in section 39-17-408(d)(2) or of section 10 of this Act.

(b) This registry shall be maintained by the bureau of investigation and made available for public inquiry on the Internet.

(c) The registry shall consist of the person's name, date of birth, offense(s) making him or her eligible for inclusion on the registry, the conviction date and county of said offenses, and such other identifying data as the bureau of investigation determines is necessary to properly identify the person, but shall not include the person's social security number.

(d) Starting September 1, 2005, the court clerks shall forward a copy of the judgment of all persons who are convicted of a violation of the offenses described in subsection (a) to the bureau of investigation.

(e) The department of correction shall forward as complete as practicable a list of all persons currently incarcerated or under their supervision who have been convicted of the offenses described in subsection (a) to the bureau of investigation.

(f) The sheriff of each county may identify such other persons for inclusion on the registry as the sheriff may deem appropriate, as long as such information is accompanied by a copy of a judgment indicating a conviction for a drug offense and a notarized letter from the Sheriff certifying that the offense was methamphetamine-related.

SECTION 14. Tennessee Code Annotated, Title 39, Chapter 17, Part 4, is amended by adding the following as a new, appropriately designated section:

(a) It is an offense for a person to intentionally use, or possess with the intent to use, any substance or device designed to falsify the results of a drug test of that person.

(b) As used in this section, "drug test" means a lawfully administered test designed to detect the presence of a controlled substance.

(c) A violation of this section is a Class A misdemeanor.

SECTION 15. Tennessee Code Annotated, Section 39-17-417, is amended by adding the following as a new, appropriately designated subsection:

( ) The offense described in subsection (a)(1) with respect to any substance defined in section 39-17-408(d)(2) shall include the preparation or compounding of a controlled substance by an individual for the individual's own use.

SECTION 16. If any provisions of this act or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the act which can be given effect without the invalid provision or application, and to that end the provisions of this act are declared to be severable.

SECTION 17. This act shall take effect immediately upon becoming a law, the public welfare requiring it.

## **ATTACHMENT 2**

### **BIOGRAPHICAL NOTE: TTU President Robert R. Bell**

Dr. Robert R. Bell became President of Tennessee Technological University on July 1, 2000. Dr. Bell received his Ph.D. in organizational behavior and management from the University of Florida in 1972. Prior to assuming the presidency, he served as Dean of the College of Business Administration at Tech.

He has served four terms on the Board of Examiners for the Malcolm Baldrige National Quality Award. Presently, Dr. Bell is a member of the Board of Directors for the Tennessee Quality Award (1993 to present) and has also served on the Panel of Judges for the Tennessee Quality Award from 1994 to present. He also served as Economic Development Consultant to the World Bank and Lead Judge for the Panel of Judges for the National Quality Award of the nation of Mauritius in the Indian Ocean in 1996 and 1997. In Mauritius, Dr. Bell served as lead examiner and chairman of ten site-visit teams. In 2005, he was the first recipient of the Ned R. McWherter Leadership Award presented by the Tennessee Center for Performance Excellence.

President Bell also served a four-year term on the national candidacy committee for AACSB International, the professional accrediting body for colleges of business. While serving on the candidacy committee, he served as pre-candidacy adviser for five schools, and served as accreditation consultant to three additional schools. He has been a member of twelve peer evaluation/site visit teams.

Dr. Bell has numerous publications in the scholarly arena in the fields of management, organizational design, computer science, and quality/productivity management. These include two books and over 70 articles, cases, and scholarly papers.

Dr. Bell currently serves on the Board of Directors and is chairman of the Finance Committee of the Ohio Valley Athletic Conference.

Locally, Dr. Bell chaired the Board of Directors for the Putnam County Chamber of Commerce, chaired the Regional Quality Council, and chaired the Putnam Tomorrow Task Force for the Putnam County Commission. He is past president of the Putnam County Family YMCA, and has served as a member of the Quality Council for Cookeville Regional Medical Center. Dr. Bell chairs the Cookeville Industrial Board, serves on the Cookeville-Putnam County Chamber of Commerce Executive Committee, is a member of the Board of Directors of the Cookeville Noon Day Rotary and the Bryan Symphony Orchestra, and is a member of the Executive Board of the Middle Tennessee Council for Boy Scouts of America.

Dr. Bell and his wife, Gloria, have three children and three grandchildren. They are members of the First United Methodist Church in Cookeville.